

1 ABSTRACT

2 Methods and apparatus are provided for use in determining “Squared Weil
3 pairings” and/or “Squared Tate Pairing” based on an elliptic curve, for example,
4 and which are then used to support cryptographic processing of selected
5 information. Significant improvements are provided in computing efficiency over
6 the conventional implementation of the Weil and Tate pairings. The resulting
7 Squared Weil and/or Tate pairings can be substituted for conventional Weil or
8 Tate pairings in a variety of applications.

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